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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,318	02/02/2001	Paul S. Christian	32262	9344
26812	7590	06/14/2006	EXAMINER	
HAYES, SOLOWAY P.C. 175 CANAL STREET MANCHESTER, NH 03101			LAM, THANH	
			ART UNIT	PAPER NUMBER
			2834	
DATE MAILED: 06/14/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/776,318

Applicant(s)

CHRISTIAN ET AL.

Examiner

Thanh Lam

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on RCE filed on 4/18/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Bouix (US 2,671,885).

Regarding claims 1 and 8, Bouix discloses a rotary joint comprising: a rotor assembly (10) having a housing and a shaft (5) extending outward from a center portion thereof; a stator assembly (34 or 2) having a cylindrical opening for receiving said shaft of said rotor assembly, the housing of said rotor assembly being secured within a housing of said stator assembly; a cavity in said stator assembly for receiving at least two semi-circular (56-59); segments positioned around said shaft of said rotor assembly; at least one air gap (radially or circumferentially among 56-59, fig. 4) positioned circumferentially between the two semi-circular segments, and means (46-49) positioned around the outside of said semi-circular segments for maintaining electrical contact between said semi-circular segments and said shaft of said rotor assembly.

Regarding claim 7, Bouix discloses said compression journal is positioned within a rotary joint.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-6, 9-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bouix in view of Hubing et al. (US 3914715).

Regarding claims 2 and 11, Bouix discloses all the aspect of claimed invention except for said semi-circular segments comprise a silver impregnated graphite material.

Hubing et al. disclose a silver impregnated graphite material for electrical contact segments.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the semi-circular segments materials of Bouix to accommodate the a silver impregnated graphite material as taught by Hubling et al. so it can equally perform and function as well as the claimed invention.

Regarding claims 3,13, the proposal in combination of Bouix and Hubing et al. disclose said cylindrical shaft comprises a coin silver sleeve around an outer portion of said shaft for contacting said semi-circular segments.

Regarding claim 4, the proposal in combination of Bouix and Hubing et al. disclose said journal comprises a shield for securing said journal within a stator assembly and blocking RF signal leakage.

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Regarding claims 5,13, the proposal in combination of Bouix and Hubing et al. disclose said means for maintaining electrical contact between said semi-circular segments and said cylindrical shaft comprises a rubber O-ring.

Regarding claims 6,14, the proposal in combination of Bouix and Hubing et al. disclose said means for maintaining electrical contact between said semi-circular segments and said cylindrical shaft comprises a conductive O-ring.

Regarding claim 9, the proposal in combination of Bouix and Hubing et al. disclose said rotary joint comprises a shield, having an opening for said shaft to pass therethrough, positioned against an end of said semi-circular segments for securing said semi-circular segments within said cavity of said stator.

Regarding claim 10, the proposal in combination of Bouix and Hubing et al. disclose said shield provides a ground connection between said semi-circular segments and said stator housing.

Regarding claim 15, the proposal in combination of Bouix and Hubing et al. disclose said cavity of said stator assembly comprises a channel having a predetermined width within said cavity for receiving said means for maintaining electrical contact between said semi-circular segments and said shaft.

Regarding claim 16, the proposal in combination of Bouix and Hubing et al. disclose said housing of said rotor assembly comprises a bearing ring positioned around an outer end portion of said housing to facilitate rotation of said rotor assembly when positioned within said stator assembly.

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Regarding claims 17, the proposal in combination of Bouix and Hubing et al. disclose said rotor assembly comprises a first capacitive feed ring through which said shaft extends and said stator assembly comprises a second capacitive feed ring through which said shaft passes, said first capacitive feed ring being disposed in close relationship to said second capacitive feed ring when said rotor assembly is positioned within said stator assembly.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (571) 272-2026. The examiner can normally be reached on tu-th 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read 'Thanh Lam', with a long horizontal flourish extending to the right.

Thanh Lam  
Primary Examiner  
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